News Releases - 2007

J. Richard Bond, Robert Hancock, Roderick Macdonald, Shana Poplack and A.P.S. Selvadurai to receive $100,000 Killam Prizes for 2007

Ottawa, March 27, 2007 – Five prominent researchers from the University of Toronto, the University of British Columbia, McGill University and the University of Ottawa will be honoured with the 2007 Killam Prizes, Canada's most distinguished annual awards for outstanding career achievements in engineering, natural sciences, humanities, social sciences and health sciences.

The $100,000 awards to J. Richard Bond, Robert Hancock, Roderick Macdonald, Shana Poplack and A.P.S. Selvadurai were announced today by the Canada Council for the Arts, which administers the Killam program.

The Killam Prizes were inaugurated in 1981 and financed through funds donated to the Canada Council by Mrs. Dorothy J. Killam in memory of her husband, Izaak Walton Killam. The Prizes were created to honour eminent Canadian scholars and scientists actively engaged in research, whether in industry, government agencies or universities. When the Canada Council was created in 1957, its mandate was to support both the arts and scholarly research; although this changed with the creation of separate research councils, the Canada Council retained responsibility for the Killam program. The Killam Fund at the Canada Council was valued at approximately $64.7 million as of March 31, 2006. The Killam Trusts, which fund scholarship and research at four Canadian universities, a research institute and the Canada Council, are valued at approximately $400 million. 2007 marks the 40th anniversary of the Killam program.

The Canada Council will present the Killam Prizes at a dinner and ceremony on **Monday, April 23** at 7 p.m. (ceremony to begin at approximately 9:00 p.m.) in the Adam Room of the Château Laurier Hotel in Ottawa. **This event is open to the media; to RSVP or arrange interviews with the winners, contact Donna Balkan at 613-566-4414, ext. 4134 or Carole Breton at ext. 4523.**

Biographical notes

J. Richard Bond, University of Toronto – Natural Sciences

J. Richard (Dick) Bond has been a key world leader throughout this "golden age" of cosmological discovery. He is responsible for major insights into the evolution of the cosmic web of galaxies we observe from tiny fluctuations generated in the early universe, as well as the definitive role played by dark matter, dark energy, and black holes. An inspirational

2008-00414/

mentor, he has built an outstanding global network, establishing Canada's pre-eminent international position in cosmology.

Dr. Bond developed the theory and experimental analysis of the cosmic microwave background (CMB) radiation, the photon afterglow of the Big Bang, into a high-precision tool for measuring basic cosmological parameters that encode the content and architecture of the cosmos. Increasingly sophisticated international CMB projects — in which Dr. Bond played a key role as a theoretician — captured startling new images of the universe 380,000 years after the Big Bang. Armed with his novel and powerful statistical approaches, his various teams uncovered evidence for the mysterious dark energies that continue to accelerate the expansion of the universe.

Dr. Bond (BSC, University of Toronto, Mathematics and Physics; PhD, California Institute of Technology, Theoretical Physics) was lured back from Stanford University to the University of Toronto in 1985 to serve as a founding member, university professor, and past-director of the Canadian Institute for Theoretical Astrophysics at the University of Toronto. Today, he also directs the Canadian Institute for Advanced Research Cosmology and Gravity Program. His ongoing research uses a new round of high-precision CMB experiments — on satellites, balloons, and the ground — to further explore the physics operating in the universe.

Dr. Bond, OC, FRS, FRSC, was recently awarded the 2006 NSERC Herzberg Gold Medal, Canada's highest research award for science, adding to his illustrious list of national and international honours.

Robert E.W. Hancock, University of British Columbia – Health Sciences

Robert E.W. Hancock — an innovative scientist and mentor in the field of microbiology and infectious diseases research — is internationally recognized for his work in discovering new treatments for antibiotic resistant infections, based on studies of bacterial physiology, innate immunity and the way in which bacteria resist antibiotics. His seminal contributions have revolved around four key areas: host defence (antimicrobial) peptides (part of the innate immune system that protects against bacteria); the structure and function of the outer membrane components of bacterial surfaces; antibiotic uptake and resistance; and the physiology of *Pseudomonas aeruginosa*, the third most common disease-causing bacteria in hospitals.

Born in Merton, England, Dr. Hancock grew up in Australia, where he earned his PhD (University Adelaide) before completing postdoctoral research at Universität Tübingen (Germany) and the University of California, Berkeley. Today, in addition to his roles as professor of microbiology and immunology at the University of British Columbia (UBC) and director of the UBC Centre for Microbial Disease and Immunity Research, Dr. Hancock serves as a co-founder of two

companies that are pursuing new technologies for the treatment of infections: Migenix Inc., now conducting late-phase clinical trials aimed at preventing catheter-associated infections; and Inimex Pharmaceuticals Inc, devoted to the discovery, development, and commercialization of novel medicines that selectively modulate the innate immune response. Earlier on, he served as founding scientific director of the Canadian Bacterial Diseases Network (1989-1996), a National Centres of Excellence Program that searches for new ways of diagnosing and treating bacterial diseases.

Dr. Hancock's numerous awards include the Aventis Pharmaceutical Award (the world's leading prize for antimicrobial research); the McLaughlin Medal of the Royal Society of Canada; and the Michael Smith Prize in Health Research, Canadian Institutes for Health Research. Dr. Hancock is an Officer of the Order of Canada.

Roderick A. Macdonald, McGill University – Social Sciences

Roderick A. Macdonald, an internationally recognized jurist and professor of law, has carved out a profile as one of Canada's most influential public intellectuals and theorists. Professor Macdonald teaches and publishes in the areas of civil law, commercial law, administrative law, constitutional law, and jurisprudence.

Unique in Canadian legal-academic circles for examining the unexplored dimensions in law — he delineates the intellectual contributions that disciplines such as philosophy, history, and the social sciences make to thinking about law and the theory of law — Professor Macdonald was one of the first to lead legal scholars into interdisciplinary pursuits. Much in demand as a consultant, he has applied his perspective and theoretical frameworks to a variety of urgent issues in Canada, including the constitutional debates over Meech Lake, the intricacies of the Quebec Civil Code, Aboriginal justice, institutional child abuse, and the practices and functioning of small claims courts. He has also prepared massive studies for royal commission and law reform projects. Professor Macdonald (BA, LLM) was called to the Bar in Ontario and Quebec. After a stint at the University of Windsor, he joined McGill University's Faculty of Law, where he served as dean (1984-1989) and in 1996 was appointed to the F.R. Scott Chair. He has also served as director of the Law in Society Program at the Canadian Institute of Advanced Research (1989-1994), where he developed a novel theoretical framework for legal pluralism, and as founding president of the Law Commission of Canada (1997-2000), where he built a renowned institute of legal research. Today, Professor Macdonald serves on the Canadian delegation to the Secured Transaction Project of the United Nation's Commission on International Trade Law. He was elected to the Royal Society of Canada and named the first Law Fellow of the Pierre Elliott Trudeau Foundation.

Shana Poplack, University of Ottawa – Humanities

World-renowned sociolinguist Shana Poplack studies language as it is spoken, rather than reported or intuited, especially in bilingual and minority language contexts in Canada. With her unique data banks of recorded and digitally transcribed natural speech, she uses novel analytical methods to trace the evolution of speech varieties within their social, historical, and linguistic contexts.

Insights from Dr. Poplack's studies of spoken Canadian French, Canadian English, African American vernaculars, New World Spanish, and the language of urban immigrant communities have challenged received wisdom about the quality of these languages. She demonstrated that alternating between languages in bilingual discourse is a skill, not a defect, and that borrowing vocabulary does not disrupt the grammatical structure of the recipient language. She showed that Black English (in Nova Scotia, for instance) is neither incorrect nor a creole, but an offshoot of Early Modern English that resisted mainstream linguistic change. She debunked the purist idea that natural internal grammatical developments in Canadian French are "corruptions" imposed by contact with English.

Dr. Poplack studied in France and the United States, earning her PhD at the University of Pennsylvania, before joining the University of Ottawa in 1981. She has had an unbroken string of Social Sciences and Humanities Research Council of Canada research grants, enabling her to maintain her world-acclaimed Sociolinguistics Laboratory. A prolific and highly respected scholar, Dr. Poplack has published a long series of influential papers and books, e.g., *African American English in the Diaspora* (2001), and is a perennial keynote speaker at linguistic and language conferences worldwide. She is Canada Research Chair in Linguistics and Distinguished University Professor at the University of Ottawa, a Killam Research Fellow (2001), a Fellow of the Royal Society of Canada, and a recipient of their Chauveau Medal (2005).

A.P.S. Selvadurai, McGill University – Engineering

A.P.S. Selvadurai melds theoretical concepts and experimental investigations with computational approaches in order to study engineering problems — particularly those linked to environmental protection.

An international leader in the fields of theoretical, applied, and computational mechanics, as well as applied mathematics and geomechanics (the discipline dealing with the application of the principles of mathematics, mechanics, and physics to the study of earth materials), Dr. Selvadurai has profoundly influenced engineering activities in nuclear waste management; soil-structure interaction; and northern geomechanics associated with offshore structures, buried pipelines, and contaminant transport in the geoenvironment.

Born in Sri Lanka, Dr. Selvadurai pursued undergraduate studies in civil engineering in the UK and did graduate studies in soil mechanics and

applied mechanics (the latter at Stanford University), before earning his PhD and a research DSc in theoretical mechanics at the University of Nottingham. In 1975, he moved to Canada, where he chaired Carleton University's Department of Civil Engineering (1982-1991) and McGill University's Department of Civil Engineering and Applied Mechanics (1993-1997). Today, he serves at McGill as William Scott Professor and James McGill Professor, Department of Civil Engineering and Applied Mechanics. Dr. Selvadurai's distinguished scholarship has led to over 400 articles in international journals and conference proceedings as well as some fifteen sole-authored and co-edited books — at least five of which are recognized as standard educational texts in the fields of mathematical modeling of geomechanics and applied and computational mechanics. He has held visiting professorships at numerous institutions worldwide and continues to collaborate with scientists at Canadian, U.S., U.K., French and German scientific establishments. Dr. Selvadurai has received many prestigious national and international honours, including both the Humboldt Senior Scientist Award and the Max Planck Research Prize (the latter being the first for a Canadian in the engineering sciences).

Corporate sponsor

Promotion of the Killam Prizes is sponsored by Scotiabank Group through support for the awards dinner and celebratory announcements in newspapers across Canada. Scotiabank is committed to supporting the communities in which we live and work, both in Canada and abroad. Recognized as a leader internationally and among Canadian corporations for its charitable donations and philanthropic activities, in 2006 the Bank provided more than $42 million in sponsorships and donations to a variety of projects and initiatives, primarily in the areas of healthcare, education and social services.

General information

The Canada Council for the Arts, in addition to its principal role of promoting and fostering the arts in Canada, administers and awards a number of distinguished prizes in the arts, humanities, social sciences, natural sciences, health sciences and engineering. Among these are the Killam Research Fellowships, the Molson Prizes, the John G. Diefenbaker Awards, the Governor General's Literary Awards, the Governor General's Awards in Visual and Media Arts and the Walter Carsen Prizes for Excellence in the Performing Arts. The Canada Council is celebrating its 50th anniversary this year.

For More Information:

Carol Bream
Director, Public Affairs, Research and Communications
1-800-263-5588 or (613) 566-4414, ext. 5201
Email this contact

Janet Riedel Pigott
Acting Director, Endowments & Prizes
1-800-263-5588 or (613) 566-4414, ext. 5041
Email this contact

Date Modified: 2007-09-27
Important Notice